

UNITED NATIONS



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2008  
NATIONAL COMPETITIVE  
RECRUITMENT EXAMINATION  
(P-1/P-2)

Notice and application form are also available for download from:

[www.un.org/Depts/OHRM/examin/exam.htm](http://www.un.org/Depts/OHRM/examin/exam.htm) (in English)  
[www.un.org/french/Depts/OHRM/examin/fexam.htm](http://www.un.org/french/Depts/OHRM/examin/fexam.htm) (in French)

(12-July-2007)

**UNITED NATIONS SECRETARIAT**  
**2008 NATIONAL COMPETITIVE RECRUITMENT EXAMINATION FOR**  
**JUNIOR PROFESSIONAL OFFICERS (P-1/P-2)**

**Outline of the Exam**

1. The United Nations Secretariat announces that a competitive examination will be held under the direction of a United Nations Board of Examiners to recruit nationals of selected member states at the junior professional level (P-1/P-2) for employment at United Nations offices.\*

2. The examination will be held in the following disciplines:

**Finance**  
**Human Rights\*\***  
**Information Technology**  
**Political Affairs**  
**Programme evaluation**  
**Environment**  
**Statistics**

3. A general description of the duties performed in these disciplines and specific academic qualifications required are given in Annex I of this announcement.

**Eligibility**

4. This examination is open to men and women who are nationals of the member states participating in the 2008 National Competitive Recruitment Examination. Qualified women are particularly encouraged to apply.

5. Applicants should hold at least a first-level university degree relevant to the discipline in which they would like to take the examination. Furthermore, applicants should not be more than 32 years old on 31 December 2008 (should be born on 1 January 1976 or after). Fluency in either English or French is required.

6. In instances where a large number of applications are received by the Board of Examiners (more than 40 per discipline in a given country), the Board reserves the right to admit to the examination only the most qualified candidates based on a review of the qualifications which are over and above the minimum entrance criteria set out in paragraphs 4 and 5. These include, but are not limited to, advanced university degrees, diplomas or certificates; knowledge of additional official languages of the United Nations (English/French, Arabic, Chinese, Russian and Spanish); a broader spectrum of work experience or any published works.

**Procedure of the Examination**

7. The examination will consist of a written examination and an interview.

8. The written examination consists of the following two parts:

(a) a general paper which tests drafting skills (forty-five minutes); and

(b) a specialized paper (three hours and forty-five minutes) which tests the substantive knowledge of the particular discipline that the candidate is applying for.

In cases of high number of candidates sitting for the exam in a given occupational group, the essay section of the specialized paper will be eliminatory.

9. The written examination questions are given in English and French, the two working languages of the Secretariat. Candidates must write their answers for the general paper in English or French. However, they may write their answers for the specialized paper in English, French or any of the other four official languages of the Secretariat, i.e., Arabic, Chinese, Russian or Spanish.

10. The written examinations will tentatively take place on 26 February 2008. The exact date and time will be announced in the convocation notification referred to in paragraph 29 of this announcement.

11. Travel expenses to and from the site of the written examination are NOT paid by the United Nations.

12. On the basis of performance in the written examination, the Board of Examiners will invite selected candidates to the interview, which will normally take place in the second half of 2008.

13. The interview will be conducted in English or French, the two working languages of the Secretariat.

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\* Major United Nations offices are located in Addis Ababa, Beirut, Bangkok, Geneva, Mexico, Nairobi, New York, Santiago and Vienna

\*\* Selected Member States only; see our Website for list

14. The travel of candidates to and from the location of the interview will be at the expense of the United Nations in accordance with its rules.

15. Following the completion of the interviews, the Board of Examiners will recommend to the Assistant Secretary-General for Human Resources Management the most suitable candidates.

16. Successful candidates will be placed on a reserve list of qualified candidates.

17. The decisions of the Board of Examiners regarding the results will be final and are not subject to appeal. The Board does NOT release individual results.

18. Successful candidates recruited at the P-2 level will serve at the UN Headquarters in New York or at other duty stations in Africa, Asia, Europe or Latin America. Junior Professionals Officers will be subject to a mandatory Managed Reassignment Programme. The purpose of the Programme is to provide Junior Professional staff with enhanced orientation, training, mobility and career support during the first five years of service at the Professional level, in order to facilitate their adjustment and to accelerate the learning period leading to productive work and job satisfaction as international civil servants. To this effect, staff members included in the Programme shall obtain experience in two different functions during their first five years of service.

### **UN Salary and Benefits**

19. For a staff member without dependents, the annual starting salary will normally be between US\$42,818 and US\$54,844 net of income tax. In addition, staff members are entitled to a post adjustment, which varies according to the cost of living of each duty station (for example, it is currently between US\$25,648 and US\$32,852 per year in New York). For a staff member with dependents, the annual starting salary will be between US\$45,650 and US\$58,808. (In New York, the post adjustment for staff members with dependents is currently between US\$27,344 and US\$35,226.)

20. In addition, staff members are entitled to the following benefits:

(a) Dependency benefits: at present, US\$ 1,780 per year for each eligible child;

(b) Participation in the United Nations Joint Staff

Pension Fund. The staff member contributes 7.9% of the pensionable remuneration and the United Nations contributes twice this rate. The Pension Fund provides disability, retirement and survivors' benefits as well as lump sum withdrawals;

(c) Medical and dental insurance contribution. The United Nations contributes the greater portion of the premiums (between 55% and 65%) in any of a number of medical insurance plans. The staff member pays a maximum of 6.16% of his/her "medical net" salary (gross salary less staff assessment plus some allowances).

21. Staff members who are assigned to a duty station which is not in their home country are also entitled to:

(a) Education grant and education grant travel per scholastic year for each eligible dependent child;

(b) Home leave to their country of nationality every two years, with the travel expenses of the staff member and his or her spouse and eligible dependent children paid by the United Nations. The first home leave is granted only if the staff member's service is expected to continue at least six months beyond the initial two-year appointment.

22. Staff members who are internationally recruited to the duty station may also be entitled to:

(a) Assignment grant at the time of recruitment and repatriation grant upon separation. The assignment grant is based on the Daily Subsistence Allowance rate set for each duty station. The repatriation grant can be as high as 58% of the quoted net salary depending on the length of continuous service away from the home country and family status;

(b) Removal of household effects, depending on the duty station. Up to 8,150 kilograms are allowed for the removal of household effects;

(c) Rental subsidy of up to 40% of the actual rent if the rent exceeds a specified percentage of the staff member's emoluments and if the rent falls within reasonable maximum rent levels.

23. The determination of salary of individual successful candidates is based on their level of academic qualifications and the length of their progressive and relevant professional experience.

24. UN staff members are entitled to 30 days of paid leave a year. In addition, staff is also eligible for other leave entitlements such as 16 weeks of

maternity leave as well as paternity, family, adoption, sickness and sabbatical leave.

### **Application Procedure**

25. All those who believe in the purposes and ideals of the United Nations and who wish to participate in the competitive examination are requested to fill out accurately and completely, in English or French, the application form, which is included in this announcement. Please detach the application form from this announcement before sending it. Application forms are also available on the Internet ([www.un.org/Depts/OHRM/examin/exam.htm](http://www.un.org/Depts/OHRM/examin/exam.htm))

26. Candidates should submit their application **once only and by one medium only**. **DO NOT** send a separate copy by e-mail, fax or regular mail. An acknowledgement of receipt of the application form, along with an application number assigned to each applicant, will be sent to the applicants by e-mail, fax or mail within 30 days. Our preferred mode of communication is by e-mail; therefore, please remember to indicate your e-mail when applying. **You are strongly encouraged to apply as early as possible**. Candidates should keep a proof of submission of their application, for example a copy of the e-mail including the date of submission. In the event that they do not receive an acknowledgement of receipt within 30 days, candidates should resubmit their application together with the proof of their first submission.

27. The decision of the Board of Examiners regarding admission to the examination will be based on a careful review of the application. In order to be considered, applicants must meet the minimum entrance criteria set forth in paragraphs 4 and 5. The Board will subsequently assess the qualifications of the candidates in accordance with the provisions of paragraph 6 above, if applicable, to decide on whether applicants should be admitted to the examination.

28. The decision of the Board of Examiners regarding admission to the examination as well as the discipline for which one is convoked is final and NOT subject to appeal.

29. All candidates will receive notification regarding their admission to the written examination. Applicants may also check the listing of application numbers, as described in paragraph 26, on the Internet by the end of December to find out if they are admitted to the written examination. For candidates that are convoked to the written examination, the notification will include information such as the exact date, time and site of the

written examination.

30. Candidates who participate in the written examination will be notified of the results upon completion of the marking of the written examination. Those who are successful in the written examination will receive instructions for the interview.

31. Applicants are responsible for promptly informing the United Nations in writing of any changes in their address. Failure to do so may result in candidates either not being convoked in time or not being convoked at all.

32. The completed application form must be received by the Examinations and Tests Section in New York no later than **31 October 2007**:

**UNITED NATIONS**  
**2008 NCRE, Room S-2575E**  
**Examinations and Tests Section, OHRM**  
**New York, NY 10017, U.S.A.**  
**OR**  
**Fax: (+1) (212) 963-3683**  
**OR**  
**E-mail: [OHRM-NCE2008@un.org](mailto:OHRM-NCE2008@un.org)**

**Late or incomplete applications will NOT be considered.**

**You are strongly encouraged to apply as early as possible due to the high volume of mail received. We will not be able to answer specific questions through e-mail or other means. Please consult the “frequently asked questions” link in our web site.**

## ANNEX I

### DESCRIPTION OF DISCIPLINES

#### **Finance**

Work performed within this discipline relates to a wide range of assignments in which accounting and auditing services are provided to the Organisation. The tasks of the discipline vary considerably and include, but are not limited to, the following: preparing financial statements about various operations at regular intervals; analysing and modifying accounting systems; approving payment of vouchers for vendors, freight, consultants and travel; approving payrolls; preparing cash-flow projections, financial compliance and operational auditing of accounts, programmes and funds; analysing and recommending modifications to financial control procedures and management practice; auditing contracts to assure completion of service; drafting audit reports.

Acceptable first-level university degrees for consideration by the Board for candidates applying in Finance are as follows: accounting, actuarial sciences, auditing, business administration (with evidence of having studied modules in auditing, accounting or finance), finance, management (with courses in accounting, auditing or finance), and international business. Any of the following experiences would be an advantage: 2-3 years' working experience in a business or governmental environment in an accounting, budgeting or financial capacity; 2-3 years' working experience in a management auditing/consulting firm; 2-3 years' working experience in an engineering or project management capacity evaluating cost/benefit elements or capital project management.

#### **Human Rights**

Work performed within this discipline relates to formulating, communicating, implementing and evaluating policies, practices and activities for the promotion and protection of all human rights for all people. The tasks of the discipline vary considerably depending upon the assignment and may include, but not limited to:

1. technical cooperation, advisory and field services – supporting the technical cooperation programmes and human rights monitoring mechanisms, including field presence, by identifying the needs of

governments for advisory and technical cooperation, designing, developing and implementing country specific capacity building projects, gathering and analyzing information regarding human rights situation in various countries;

2. research and analysis – conducting substantive research projects on the right to development and the whole range of human rights issues, analyzing and drafting reports, backgrounders and position papers relating human rights questions, providing policy analysis, advice and guidance on substantive procedures, researching right-based development strategies and supporting the integration of human rights into the United Nations system-wide programmes;

3. support to the Human Rights bodies and mechanisms – planning, preparing and servicing sessions and meetings, preparing reports and other documents for the human rights treaty bodies, following-up on decisions and recommendations taken at meetings of human rights bodies, processing individual communications under the complaint procedures, supporting the work of Special Rapporteurs, and servicing Voluntary Funds and Board of Trustees.

Acceptable first-level University degrees for consideration by the Board for candidates applying in Human Rights are as follows: law, international relations, economics, social or political sciences, all of which must be with a specialization in Human Rights. The requirement for a specialization in Human Rights in any of the above-mentioned disciplines can be waived if the candidate has at least two years' work experience at the national or international level in an area relevant to Human Rights or two years' work experience in technical cooperation or project management, including budget management.

#### **Information Technology**

Work performed within this occupation relates to a wide range of assignments in the development and operation of computer-based information systems, including analysis, programming and operation support, for computer systems which touch, directly or indirectly, many parts of the Organization. The duties of the occupation vary considerably and may include, but not be limited to, some of the following: analysing

various informational problems in conjunction with personnel of organizational units and making recommendations on the feasibility and cost benefits of the application of information technology to the problem; selecting appropriate language, techniques and methods for a system; preparing system and programme documentation; testing, modifying and supervising installation of systems and programmes; reviewing the acquisition of information technology equipment; supervising and coordinating the coding of data; writing of computer programmes; monitoring of computer and peripheral machine operations.

Acceptable first-level university degrees for consideration by the Board for candidates applying in Information Technology are as follows: computer science (engineering, programming, software development, or theory), information technology, information management, informatics, telecommunications, and artificial intelligence. For candidates who have no first-level university degree in any of the abovementioned fields but have at least two years' professional experience in these fields, the degree may be substituted by one of the following first-level university degrees: electrical engineering, electronics, mathematics, physics, robotics, or statistics.

### **Political Affairs**

Work performed within this discipline relates to a wide range of job assignments that are concerned with providing research, committee service and liaison support to the deliberative bodies, to commissions and to delegates. The tasks of the discipline vary considerably and include, but are not limited to, some of the following: researching and preparing reports on matters such as conflict prevention, electoral assistance, outer space, a particular region or country of the world, or human rights; recommending policy options; summarising meetings of the various committees of the Organisation; participating in special missions to investigate problems; answering requests for information from Member States, non-governmental organisations and the general public; serving as secretary or assistant secretary to a working group of committee and in this capacity, preparing draft agendas; providing liaison among the various sections of the Organisation to ensure that operational activities are accomplished.

Acceptable first-level university degrees for consideration by the Board for candidates applying in Political Affairs are as follows: Political Science, International Relations, Modern History, Peace Studies, Asian/ African/ American/ European/ Middle Eastern etc. Studies or other relevant discipline.

### **Programme Evaluation**

Work performed within this discipline relates to the conduct and management of project, programme, policy and system-wide evaluations. The tasks of the discipline vary considerably depending upon the assignment and include, but are not limited to, the following: assisting in the planning, design and conduct of in-depth and thematic evaluations; conducting background research; assisting with data collection and analysis, including surveys, in-depth interviews, focus groups, and other data collection methods, including statistical methods; assisting in drafting final reports, including the formulation of convincing and well substantiated conclusions and recommendations; assisting in policy development based on evaluation findings concerning programme relevance, effectiveness, efficiency and impact; preparing various written documents, including background papers, analyses, guidelines and conference room papers; contributing to efforts to strengthen the role of evaluation in the United Nations Organisation so as to improve programme efficiency and effectiveness; establishing and maintaining effective relationships with clients and partners in the Secretariat, funds and programmes; and providing support to self-evaluation.

Acceptable first-level university degrees for consideration by the Board for candidates applying in Evaluation are as follows: social or natural sciences, public administration, programme evaluation or related field. One to two years of evaluation experience would be an advantage.

### **Environment**

Work performed within this discipline relates to servicing a wide range of bodies deciding on environmental policy and how to implement it. The tasks of the discipline include, but are not limited to, the following: planning, implementing and monitoring work related to the preparation and follow up to ministerial/high level and other intergovernmental meetings; support negotiations and implementation of legal instruments on the environment; preparing and drafting substantive documentation; planning, designing and conducting studies on issues related to environmental management; provide guidance and assistance to countries; deal with environmental assessment and monitoring activities in order to evaluate progress in the implementation of environmental policies and to improving the basis of political decision making.

Acceptable first level, preferably advanced university degree for consideration by the Board for candidates applying in environment as follows: natural

sciences, economics, social sciences, international relations or public policy, engineering, legal affairs or related field with specialization on environmental issues. Any of the following experience would be an advantage: 2-3 years practical experience in environmental policy and management, and /or sustainable development; 2-3 years working experience at national or international level.

### **Statistics**

Work performed within this discipline relates to a wide range of assignments in which statistical services are provided to the Organization. The tasks of the occupation vary considerably depending upon the assignment and include, but are not limited to, the following: preparing and designing questionnaires or other research instruments for the collection of statistical data from Member States for the statistical yearbooks and other publications giving comparative world-wide statistics; more generally: collecting, processing and disseminating data from Member States; providing technical assistance to developing

countries to assist them in strengthening their national statistical capacity; assisting Member States in developing standardized statistical classifications, definitions and methods in such areas as economic statistics, like industrial, energy and trade statistics and national accounts and environment, social statistics, demography; developing statistical methods for data validation and estimation; conducting research in the area of index calculation and seasonal adjustments.

Acceptable first-level, preferably advanced, university degree for consideration by the Board for candidates applying in Statistics are as follows: Statistics, Mathematics, Economics with a specialization in statistics and/or econometrics, Social Sciences with a specialization in statistics, Demography. Any of the following experiences would be an advantage: 1-2 years' working experience with a National Statistical Office; 1-2 years' working experience in environmental, social, demographic, energy, trade or economics statistics.

**ANNEX II  
EXAMINATION SAMPLES  
SPECIALIZED PAPER**

**Finance**

**Essays**

A. Using the following trial balance and adjustments, prepare a Balance Sheet as of 30 June 1994:

<u>Trial balance, 30 June 1994</u>	Debits (Dollars)	Credits (Dollars)
Cash	10,789	
Investments	60,000	
Pledged contributions unpaid	251,200	
Accounts receivable	1,713	
Salary advance	5,000	
Salaries	38,689	
Travel	5,058	
Miscellaneous operating expenditures	17,204	
Supplies	8,531	
Fellowship/Training expenditures	22,836	
Printing	2,700	
Unpaid expenditures (unliquidated obligations)	19,325	
Prepaid insurance	300	
Unliquidated obligations payable		19,325
Income from pledged contributions		200,000
Interest income		3,247
Public donations		10,000
Accounts payable		2,921
Fund balance 1 January 1994		207,852
	443,345	443,345

**Adjustments:**

1. \$3,000 of the \$5,000 salary advances granted has been earned by staff members during the month of June 1994.
2. The unpaid pledged contribution of the Government of Country X was paid in cash on 28 June through the UNDP office and the Resident Representative sent a cable request to have the amount reflected in the statements. The cash contribution was transferred to Chemical Bank, New York by cable.
3. The cost of insurance premium which was paid in advance on 1 January was for a one-year policy. Fifty percent of the value of the prepaid insurance had expired.
4. The United Nations received a firm pledge for a contribution of \$50,000 from the Government of Country X on 30 June 1994 through the Economic Commission for Latin America and the Caribbean which was not yet included in the trial balance.

B. As part of an overall review and study of a major computerized Electronic Data Processing (EDP) financial system, what are the procedures which should be performed by an independent auditor to evaluate internal controls?

**Questions**

1. Andrew & Associates of the United States forwarded merchandise to JMB International of Japan. Andrew billed JMB 22,000 yen for shipping charges on 16 March 1994, with payment due 15 April 1994.

Assume that on 16 March 1994, 1 yen = \$.44 and that on 15 April, 1 yen = \$.41. Prepare the journal entries on Andrew's books to record the sale to and subsequent payment from JMB International.

2. A firm needs \$85,000 cash. A local bank will make a one-year loan but requires a 15% compensatory balance (the company would ordinarily keep a zero balance since the balance maintained in the account earns no interest). If the stated rate of interest is 12%, what is the effective cost?

3. The High Company obtained a short term loan for \$80,000 from the Centrum Bank on 1 December. The loan term was 60 days with an annual interest rate of 9.5%. On the maturity date the note was renewed for a further 30 days at an interest rate of 10.25%. On this date High Company issued a check to pay the interest for the accrued interest. At the end of the 30 days High Company issued a check to pay for the final amount owing to the Bank, including the principal.

- a) Prepare entries to record the issue of the note.
- b) Assume that at the end of each month High Company recorded in its books the accrual of interest. Prepare month end entries.
- c) Show entries for the check issued on the first maturity date.
- d) Show entries for the check issued at the second maturity date.

4. Enumerate four items you would expect to find in an auditor's permanent audit file.

5. What should an auditor be looking for, or trying to ascertain, during his examination of accounts receivable at balance date?

6. An international organization has local offices located in many countries with different exchange rate systems. The local offices hold bank accounts in local currencies but the unit of account for the entire organization is in US dollars.

a) Discuss the possible financial implications of foreign exchange differences (including a fall or rise in the local currency, and a fall or rise in the US dollar).

b) Briefly discuss the following exchange rate policies:

- (i) a managed floating exchange rate;
- (ii) a fixed exchange rate linked to a basket of currencies; and
- (iii) a fixed exchange rate backed by a currency board system.

7. A truck was purchased on 1 January 1994, for \$20,000 with no resale value. It will be depreciated for 8 years using the straight-line method. Show how the Truck account and the related Accumulated Depreciation account would appear on the balance sheet on (a) 31 December 1994; (b) 31 December 1995.

8. Indicate four actions you would include within your audit programme to verify the accuracy of the accounts payable appearing in the balance sheet.

## List of topics

Suggested reading includes basic textbooks and periodicals in the field of finance covering the following topics:

- Accounting
- Auditing
- Financial administration
- Investments
- Treasury

## Human Rights

### Essays

The Human Rights Council has mandated the High Commissioner for Human Rights to undertake a study on the effects of globalisation on the enjoyment of human rights. As an officer in the responsible branch, you have been assigned to carry out the necessary research and draft the study. You are aware that the resolution mandating the study was a contentious one, with every word hotly debated along regional lines. One delegate called globalisation the most important modern force for human rights, in its potential for creation of economic opportunities. Another identified it as the greatest threat to human rights since colonialism, in its potential for marginalizing and excluding so many. You also know that human rights groups around the world have been increasingly vocal in their calls for integrating human rights in the processes of globalisation. For her part, the High Commissioner has called for the articulation of a “rights-based approach to the processes of globalisation, in which international norms and standards serve as the rules of the game.” In a search of existing UN documents, you find plenty of political debate, but virtually nothing to define the issues associated with globalisation in human rights terms.

1. What would be the principal sources to which you would turn to establish the legal/normative framework for the study? Please list these in order of importance.
2. What key principles of international human rights law would you invoke in your study?
3. Propose an outline for the study, listing the various chapters to be included.
4. Propose a one-paragraph summary of the basic thesis or line of argument of the study.

### Questions

1. Describe the role and mandate of the United Nations High Commissioner for Human Rights.
2. Explain the legal differences between a declaration, a covenant, and a convention adopted by the United Nations organs.
3. List the seven principal (UN) international human rights treaties currently in force.
4. What do you know about current endeavours to reform the principal UN human rights mechanisms? What do you see as the challenges and the political pitfalls of reform?
5. Recent years have brought important developments in strengthening the judicial enforcement of international human rights and humanitarian law. Name three (3) such developments since the 1990s.
6. One aspect of the Secretary-General’s Reform programme of 1997 called for integrating the human rights programme into a broad range of the organisation’s activities, including in the peacekeeping, development and humanitarian areas. Discuss the objectives of this process and provide three examples of how it is being accomplished.
7. Describe the “Global Compact” and discuss its importance for human rights.

The examination deals with international human rights law and the United Nations mechanisms aimed at their promotion and protection. As the questions are based upon both substantive and procedural human rights law and mechanisms, familiarity with the Charter of the United Nations, international human rights law, relevant UN procedures and mechanisms are essential.

## List of Topics

- Children's Rights
- Civil and Political Rights
- Discrimination
- Economic, Social and Cultural Rights
- Human Rights Bodies
- Human Rights Council
- Human Rights in Development
- Indigenous People
- International Human Rights Instruments
- Migrant Workers
- Minorities
- Racism and Racial Discrimination
- Right to Development
- Right to Education
- Slavery
- Special procedures mechanisms (Human Rights Council)
- Technical Cooperation
- War Crimes
- Women's Rights/gender mainstreaming

## Reference materials

*A Handbook of International Human Rights Terminology.* By H. Victor Condé, University of Nebraska Press.

*Human Rights: A Compilation of International Instruments.* UN/DPI. / *Droits de l'homme : recueil des instruments internationaux.* ONU/DPI.

*Integrating Human Rights with Sustainable Human Development.* UN, 1998. / *Intégrer les droits de l'homme au développement durable.* 1998.

*The United Nations and Human Rights, 1945-1995.* UN/DPI, 1995 / *Les Nations Unies et les droits de l'homme, 1945-1995.* Série "Livres bleus des Nations Unies", Volume VIII. ONU /DPI. 1996. 536 pages.

*United Nations Action in the Field of Human Rights.* UN / *Les activités de l'ONU dans le domaine des droits de l'homme.* ONU.

*World Conference on Human Rights: The Vienna Declaration and Programme of Action.* DPI, New York, 1995

## Information Technology

### Essays

A. Enumerate and explain the 7 layers of the OSI model. Give examples where possible.

B. You are supervising an Information Technology Helpdesk in a duty station with approximately 300 PCs connected to one LAN. Your management has received reports that the performance of the Helpdesk (response rate) has decreased over the last 6 months. The staffing level of the Helpdesk has remained the same over that time.

You have been requested to provide a justification for the decrease in the response rate. List and elaborate on factors that have an impact on the performance of a helpdesk.

C. You are responsible for developing the selection criteria, which will serve as a basis for the future acquisition of software packages by a large international organization.

The organization has no clear methodology for acquiring software packages.

You were asked by your supervisor to develop a comprehensive list of criteria to be evaluated and the questions to be raised in assessing these criteria.

Prepare a list of five of these criteria. For each criterion on your list, prepare four questions, which you would include in assessing software packages.

### Questions

1. Describe the main functions performed by telecommunications control software.

2. a) Describe briefly the concept of a Virtual Private Network (VPN).

b) Compare a VPN and the traditional WAN.

c) What is a site-to-site VPN?

3. What purposes are served by thorough programme documentation?

4. The UNIX operating system was designed a long time ago. It is only recently that its use became widespread. Briefly explain why this happened.

5. Discuss briefly 3 issues related to software distribution through local area network. Give 1 example for each.

6. Explain briefly the concept of virtual memory. Explain briefly if there is any special consideration to be taken by the programmer when structuring an application to be run in a system using virtual memory.

7. Describe the terms Disaster Recovery and Business Continuity and briefly outline measures to implement these concepts in a non profit organization such as the United Nations.

8. Cite and briefly describe 5 security measures aimed to prevent unauthorized access to a network through its INTERNET connection.

### List of topics

Suggested reading includes basic textbooks and periodicals in the field of electronic data processing covering the following topics:

- Fundamentals of electronic data processing
- Computer system architecture
- Fundamentals of programming and analysis
- Operating system functions and facilities
- Basic concepts of data base management systems
- Network security
- Standard textbooks and course materials, as well as reference manuals available from hardware and software suppliers

## Programme Evaluation

### Essays

1. You are given ten minutes with the Secretary-General to explain the role of evaluation in the United Nations. What would you say to him to convince him of the importance of the evaluation function?
2. You are asked to conduct an evaluation of a programme. Select any programme you are familiar with, and describe the process you would take, including what you need to take into consideration, in order to plan for, design and conduct the evaluation.
3. Describe both the advantages and disadvantages of the following different modes of survey administration: in-person, internet, telephone and mail.

### Questions

1. How are randomized trials used in evaluation? Briefly explain.
2. Why is it better to use a random sample than a non-random sample when surveying a large population?
3. Define what is meant by the logical framework and identify its key components.
4. What is a focus group and how can it be used in evaluation?
5. What is the difference between quantitative and qualitative data?
6. What is the difference between “external evaluation” and “self-evaluation”? Briefly discuss the comparative advantages of each one.
7. Describe where evaluation fits into the project/programme cycle.
8. Identify strategies for increasing survey response rates.

### List of topics

Suggested reading includes basic textbooks in the field of evaluation and related work covering the following topics:

- Programme evaluation
- Sampling
- Survey methodology
- Quantitative and qualitative data analysis
- Basic research methods
- Focus groups
- Interviewing

## Political Affairs

### Essays

- A. Describe the political implications of the implementation of the new international economic order requested by developing countries.
- B. It has been said that a nuclear conflict has been avoided so far because of the balance of nuclear armament. Discuss this statement. What other options exist to achieve the maintenance of peace and security?
- C. One of the responsibilities of the "good offices of the Secretary-General" is to enhance the peace-making capabilities of the UN. Discuss in the light of recent developments how successful the UN has been in this area.

### Questions

1. Discuss briefly how the gathering of objective facts and timely information can contribute to the implementation of the highest United Nations goal, the maintenance of international peace and security, and how the Organisation could and should seek to strengthen its fact-finding capacity.
2. Briefly discuss why there is a current debate on the restructuring of the composition of the Security Council.
3. Explain the terms "vertical proliferation" and "horizontal proliferation" which often appear in discussions on disarmament.
4. Using any example, briefly discuss the relevance of peacekeeping operations within the context of the Charter mandate for the settlement of disputes, and show in what ways, if any, peacekeeping contributes to peacemaking.
5. Several nations are thought to be attempting to develop nuclear weapons. What measures can the United Nations take to forestall such a development?
6. Explain briefly the importance of the "non-aligned movement" in today's international relations.
7. Define and compare the following types of international instruments:
  - a) Declarations;
  - b) Conventions;
  - c) Pacts;

d) Resolutions of United Nations' organs.

8. The United Nations has monitored several elections. Describe and discuss recent examples.
9. What is the principal judicial organ of the United Nations? Describe its role in the Organisation.
10. Identify four major responsibilities and/or functions of the Security Council. Give an example of actions taken by the Security Council for each responsibility or function mentioned.

### List of topics

Suggested reading list: basic textbooks and periodicals in the field of political affairs and related work

The following topics should be covered:

- United Nations work in general; resolutions and decisions adopted by Security Council and General Assembly
- Refugees
- Human rights questions
- Racial discrimination and the debate around genocide
- Environment/energy/natural resources
- Outer space questions
- Laws of the Sea
- World economic development
- Disarmament
- Nuclear arms/power
- Peacekeeping/peacemaking
- Technological development
- Hunger, malnutrition, and population questions
- Academic journals on political subject matters (e.g. Foreign Affairs)
- Transnational corporations
- Human settlements
- Immigration
- AIDS
- Role of international organisations and civil society in development

### General publications

The Economist, Jeune Afrique, Newsweek, Far Eastern Economic Review, L'Express, Le Monde, etc.

## Environment

### Essays

1. The integration of environmental concerns into sectoral policies is one of the main future challenges. Describe the meaning of the term “integration” and discuss the main consequences of such integration for environmental policies and management.
2. “In the years of transition faced by countries of Eastern Europe, Caucasus and Central Asia (EECCA) decentralization of environmental management has formed part of the institutional restructuring and reform processes”. Analyze this statement and list three major policy areas to be under the responsibility of the local and regional authorities and the consequence of such decentralization.
3. “Sustainable development” has become a policy objective in most countries. Describe the main targets of sustainable development. Then for an imaginary country discuss one major difficulty to attain sustainable development in each of the three areas: energy, agriculture and transport.

### Short questions

1. Discuss the pros and cons of currently pursued waste management strategies.
2. Give your opinion on “environmental protection funds” currently in use in several European Transition countries and state the major reasons for your opinion.
3. How do agricultural production techniques affect the quality of environmental media and what are the causes?
4. Why is the maintenance of biodiversity an objective for environmental policy? Which are the risks and which are the policy measures that can reduce risks?
5. What are the major environmental consequences associated with the development of human settlements in Europe?
6. Mineral resource extraction has a multiple direct and indirect impacts on the environment. Briefly explain the kind of degradation that can occur and the consequences on the environment.

7. Which are the main issues that you would look at if you had to assess the effects of road transport on the environment?

8. Public information and participation play an important role in encouraging pollution reduction. Please tell us which measures have been taken by Governments to increase participation in decision-making?

### List of topics

Suggested readings include documentation and publications to be found on the UNECE website <http://www.unece.org/env/welcome.html>,

of UNEP <http://www.unep.org/>, and

of the Commission on Sustainable Development <http://www.un.org/esa/sustdev/csd/policy.htm>.

Candidates should be able to deal with environmental questions related to economies in transition and western economies and to some extent to the developing countries.

**Statistics**

**Essays**

A. The computer manufacturing industry in a country produces basically two classes of computers. An annual price survey of the industry includes two models of each class (see table below). *Model 1a* was discontinued after 2002, and it was replaced in the survey sample by a slightly upgraded version, called *Model 1a+*. The results of the survey from 2000 to 2002 are as follows:

<i>Price (US\$) of surveyed computer models</i>			
	2000	2001	2002
<b>Computers of class 1</b>			
Model 1a	1,500	1,450	
Model 1a+			1,350
Model 1b	1,200	1,180	1,180
<b>Computers of class 2</b>			
Model 2a	425	400	410
Model 2b	540	550	550
 <i>Estimated number of computers sold (in thousands)</i>			
	2000	2001	2002
<b>Computers of class 1</b>			
Model 1a	20	35	
Model 1a+			40
Model 1b	10	15	15
<b>Computers of class 2</b>			
Model 2a	360	350	370
Model 2b	140	140	130

<i>Characteristics of computer models of class 1 included in the survey</i>			
	Model 1a	Model 1a+	Model 1b
Hard Disk	40GB	80GB	80GB
Mflops*	201	201	185

\* Millions of floating point operations per second

- 1) The chained Laspeyres and Paasche price index number formula are (where  $p$  stands for price and  $q$  for quantity):

$$P_{t-1,t}(q_{t-1}) = \frac{\sum p_t q_{t-1}}{\sum p_{t-1} q_{t-1}} \quad \text{Laspeyres} \qquad P_{t-1,t}(q_t) = \frac{\sum p_t q_t}{\sum p_{t-1} q_t} \quad \text{Paasche}$$

- (a) Calculate the chained Laspeyres and Paasche price indices for each computer class (using always the previous period as base year).

- (b) Explain assumptions you make to obtain your results, especially regarding the replacement of *Model 1a* with *Model 1a+*.
- 2) The national statistical agency also collects information on production of each computer class on an ongoing basis:

<i>Production shares</i>			
	2000	2001	2002
Computers of class 1	0.15	0.25	0.23
Computers of class 2	0.85	0.75	0.77

- (a) Obtain the aggregate chained Laspeyres and Paasche price indices for computers (i.e. general price indices for the whole computer industry, setting the previous period as the base year for the current price index).
- (b) According to each of the two chained index formulas, how much has the general level of prices for computers increased in 2002 as compared to 2000?
- (c) How can any difference between the results obtained using Laspeyres and Paasche formulas be explained?
- 3) Suppose you have to interpret a time series of production or sales numbers of computers. Why would a corresponding time series of price indexes be useful? Please explain.

B. You have been asked to construct a questionnaire for a survey on housing. The survey will be administered door-to-door by interviewers. Your colleagues remind you that respondents often fail to understand the questions the researcher is trying to ask.

1) What are five common causes of this failure to communicate to the respondent (limit your answer to five causes)? What can you do to avoid making these mistakes?

In designing the sample for the housing survey you are asked to make sure it is representative of the population. One of your colleagues suggests that you use clusters in your sample design whilst another suggests that you should stratify your sample.

2) What effect does clustering and stratification for this sample have on, for instance, the standard error? Contrast these methods of sampling with simple random sampling.

### Questions

1. Suppose

$$f_{Y|X}(y|x) = \begin{cases} 1 & x < y < x + 1 \\ 0 & \text{otherwise} \end{cases}$$

and that  $X$  has the uniform  $(0,1)$  distribution

- (a) Find  $E(Y)$
- (b) Find  $f_{X|Y}(x|y)$
- (c) Find  $P(X + Y < 1)$
2. Define the mean, mode and median and show by diagram how they are normally related in a distribution which is skewed to the right.
3. A bowl contains four lottery tickets with the numbers 111, 221, 212, and 122. One ticket is drawn at random from the bowl and  $A_i$  is the event that 2 is in the  $i$ th place,  $i = 1, 2, 3$ .

Determine whether  $A_1$ ,  $A_2$ , and  $A_3$  are independent.

4. Describe two ways of measuring growth rates of time series and comment on the advantages and disadvantages of each.
5. Distinguish clearly between systematic errors and random errors in a sample inquiry.
6. In a college class, there are 80 men and 40 women. There are 36 smokers and 84 non-smokers. What is the likelihood that any student selected at random is a male smoker under the following conditions:
  - a. If the percentage of smokers among men is the same as the percentage of smokers among women (i.e. no relationship between sex and smoking)?
  - b. If the percentage of smokers among men is twice the percentage of smokers among women (i.e. men are twice as likely to smoke as women)?
7. A national service requires all applicants to undergo a drug screening examination. In a batch of 25 applicants one fails the test. The applicant claims never to have used any drugs. It is known that the equipment used in the test has been shown empirically to be able to detect the presence of drugs 99% of the time when the drugs are present. The manufacturer also admits that 5% of the time the equipment detects drugs even when they are not there. It is also known that at least 90% of those who enlisted in the armed forces of the country have not used drugs. What, if anything, can be said about the claims of the applicant?
8. The table below shows the number of “excellent” students (receiving A scores in their exam) and the number of “mediocre” students (receiving C scores in their exam) according to three different teachers, Mr. X, Mr. Y and Mr. Z, that have been asked to mark the same exam.

Test the hypothesis that the number of “mediocre” students is the same for each teacher (Hint: test the hypothesis that being “excellent” or “mediocre” is independent by the teacher who marked the exam).

	Mr. X	Mr. Y	Mr. Z	Total
Excellent (A)	50	47	56	153
Mediocre (C)	5	14	8	27
Total	55	61	64	180

9. Of the 50 people on a bus,  $1/5$  opposes the smoking ban on the bus. If 15 of these passengers are selected at random, without replacement, (a) what is the probability that exactly 5 of them oppose the smoking ban and (b) what is the expected number of passengers in the sample that opposes the smoking ban?

#### List of topics

Suggested reading includes basic textbooks or manuals in the field of statistics covering the following topics:

- Probability Theory
- Descriptive Statistics
- Inferential Statistics
- Demographic and Social Statistics
- Economic Statistics

## EXAMINATION SAMPLES

### GENERAL PAPER

#### Summary

Summarize the following report in your own words. The report should be reduced to approximately one third of its original length; the summary should have between 200 and 300 words. Failure to meet these guidelines will result in point loss.

#### Text

Ecology and economics should push in the same direction. After all, the “eco” part of each word derives from the Greek word for “home”, and the protagonists of both claim to have humanity's welfare as their goal. Yet environmentalists and economists are often at loggerheads. For economists, the world seems to be getting better. For many environmentalists, it seems to be getting worse. These environmentalists have developed a sort of “litany” of three big environmental fears: natural resources are running out; the population is ever growing, leaving less and less to eat and the planet's air and water are becoming ever more polluted. Human activity is thus defiling the earth, and humanity may end up killing itself in the process. The trouble is, the evidence does not back up this litany. The early environmental movement worried that the mineral resources on which modern industry depends would run out. Clearly, there must be some limit to the amount of fossil fuels and metal ores that can be extracted from the earth: the planet, after all, has a finite mass. But that limit is far greater than many environmentalists would have people believe. Reserves of natural resources have to be located, a process that costs money. That, not natural scarcity, is the main limit on their availability. However, known reserves of all fossil fuels, and of most commercially important metals, are now larger than were believed to be. In the case of oil, for example, reserves that could be extracted at reasonably competitive prices would keep the world economy running for about 150 years at present consumption rates. Add to that the fact that the price of solar energy has fallen by half in every decade for the past 30 years, and appears likely to continue to do so into the future, and energy shortages do not look like a serious threat either to the economy or to the environment. The population explosion is also turning out to be a bugaboo. As far back as the end of the 18<sup>th</sup> Century Thomas Malthus claimed that, if unchecked, human population would expand exponentially, while food production could increase only linearly, by bringing new land into cultivation. He was wrong. Population growth has turned out to have an internal check: as people grow richer and healthier, they have smaller families. Indeed, the growth rate of the human population reached its peak, of more than 2% a year, in the early 1960s. The rate of increase has been declining ever since. It is now 1.26%, and is expected to fall to 0.46% in 2050. The United Nations estimates that most of the world's population growth will be over by 2100, with the population stabilising at just below 11 billion. Granted, the threat of pollution is real, but exaggerated. Many analyses show that air pollution diminishes when a society becomes rich enough to be able to afford to be concerned about the environment. For London, the city for which the best data are available, air pollution peaked around 1890. Today, the air is cleaner than it has been since 1585. There is good reason to believe that this general picture holds true for all developed countries. And, although air pollution is increasing in many developing countries, they are merely replicating the development of the industrialized countries. When they grow sufficiently rich they, too, will start to reduce their air pollution. All this contradicts the litany. Yet opinion polls suggest that many people, in the rich world, at least, nurture the belief that environmental standards are declining. Scientific funding goes mainly to areas with many problems. That may be wise policy, but it will also create an impression that many more potential problems exist than is the case. The attitude of the media is also a factor in the distortion. People are clearly more curious about bad news than good. Newspapers and broadcasters are there to provide what the public wants. That, however, can lead to significant distortions of perception. To replace the litany with facts is crucial if people want to make the best possible decisions for the future.